

Mazieres B, Rouanet S, et al. Topical Ketoprofen Patch in the Treatment of Tendinitis: A Randomized, Double Blind, Placebo Controlled Study. J Rheumatol 2005;32:1563-70.

Design: Randomized clinical trial

Population/sample size/setting:

- 172 patients (72 men, 100 women, mean age 47) treated for tendinitis of the upper and lower extremities in a university rheumatology department in France
- Eligible if age 18-70, with painful tendinitis with daily activity of at least 40 points on a 100 point scale of less than 15 days' duration, with both spontaneous pain and pain on palpation of the tendinous insertion into bone
- Exclusion criteria included fibromyalgia, osteoarthritis, rheumatoid arthritis, rupture of rotator cuff, shoulder capsulitis, hypersensitivity to NSAID, steroid use within 30 days, opioid use or topical medication use within 7 days, or NSAID use within 48 hours

Main outcome measures:

- All patients received a topical patch for application each morning for 14 days
- Randomized to active ketoprofen 100 mg patch(n=87) or placebo (n=85)
- Primary outcome measure was defined as change in global pain during daily activities between baseline and day 7 of treatment
- At 7 days, ketoprofen reduced pain more effectively than placebo on the VAS with activity; ketoprofen reduced pain by 55.6%, and placebo reduced pain by 36.8%
- Further analyses of secondary endpoints (14 day pain reduction and functional disability) also were in favor of ketoprofen over placebo
- Adverse effects were common in both groups, with no difference in frequency between ketoprofen (46%) and placebo (40%) patch; most were local cutaneous reactions such as erythema, itching, irritation, and burning, and were attributed to the patch itself rather than the medication

Authors' conclusions:

- Ketoprofen patch is more effective than placebo patch in alleviating pain with daily activity in patients with tendinitis
- The patch needs to be applied to the same skin area, which is occluded for several days
- A 3-14 day treatment with the patch is useful for nonarticular rheumatism; a 7 day period may be optimal

Comments:

- There were 59 patients with shoulder complaints, 52 with epicondylitis, 13 with de Quervain's, and 48 with lower extremity complaints; all the data were pooled, with no breakdown by body region
- Because some interventions are not equally effective between upper and lower extremities, such a breakdown would have been useful

- The functional disability scale was on a scale of 0-3 and was the same for both upper and lower extremities; this does not provide a great deal of room for definition of the nature of the functional changes with treatment
- As the authors note, the need for prolonged skin occlusion will limit the length of time for which the patch is likely to be well tolerated

Assessment: Adequate for an evidence statement that topical ketoprofen is more effective than placebo in reducing pain, but that the need for continuous skin application may limit the time frame for its use